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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Carl L.C. Kah, III

Date:

Serial No.: 09/686,197

Group Art Unit: 3752

Filed: October 10, 2000

Examiner: L. Morris

For: OPERATIONALLY CHANGEABLE MULTIPLE NOZZLES SPRINKLER

Asst. Commissioner for Patents
Washington, D.C. 20231

RECEIVED

MAY 30 2002

TECHNOLOGY CENTER R3700

SUPPLEMENTAL DECLARATION
OF CARL L.C. KAH, III
FOR REISSUE PATENT APPLICATION

I, Carl L.C. Kah, III, declare as follows:

1. My residence and post office address are 778 Lakeside Drive, North Palm Beach, Florida 33408. I am a citizen of the United States of America.

2. I believe I am the original, first and sole inventor of the subject matter which is described and claimed in U.S. Patent number 5,826,797 ("the '797 patent"), granted October 27, 1998, and for which a reissue is sought on the invention entitled OPERATIONALLY CHANGEABLE MULTIPLE NOZZLES SPRINKLER, in accordance with the preliminary amendment filed herewith, the specification of said patent being attached hereto.

3. I have reviewed and understand the contents of the above identified patent, including the specification and claims, as amended by any amendment referred to above.

4. I acknowledge the duty to disclose all information known to be material to patentability in accordance with 37 C.F.R. § 1.56.

5. I verily believe the '797 patent to be partly inoperative by reason of my claiming less than I had a right to claim in the patent.

6. At least one error upon which reissue is based is that independent claims 1 and 12 recite "means for" language, which, under 35 U.S.C. § 112, 6th paragraph, is construed to cover the corresponding structure described in the specification and equivalents thereof. Such a definition of the invention is narrower than necessary to distinguish the claimed invention over the prior art. Thus, I claimed less than I had a right to claim in the '797 patent.

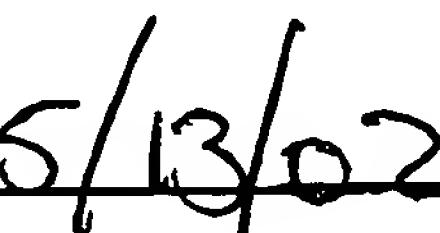
7. I further state that all errors which are being corrected by this reissue application up to the date of this declaration and including with respect to the claims presented in the Preliminary Amendment dated April 6, 2001, arose without deceptive intention on my part.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issued thereon.



Carl L.C. Kah, III

Date:



5/13/02



US005826797C1

(12) REEXAMINATION CERTIFICATE (4305th)

United States Patent
Kah, III

(10) Number: US 5,826,797 C1
(45) Certificate Issued: *Apr. 3, 2001

(54) OPERATIONALLY CHANGEABLE MULTIPLE NOZZLES SPRINKLER

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Reexamination Certificate for:

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Appl. No.: 08/405,033

Filed: Mar. 16, 1995

(*) Notice: This patent is subject to a terminal disclaimer.

(51) Int. Cl. 7 B05B 1/16

(52) U.S. Cl. 239/394; 239/391

(58) Field of Search 239/390, 391, 239/393, 394, 436, 71, 74, 242

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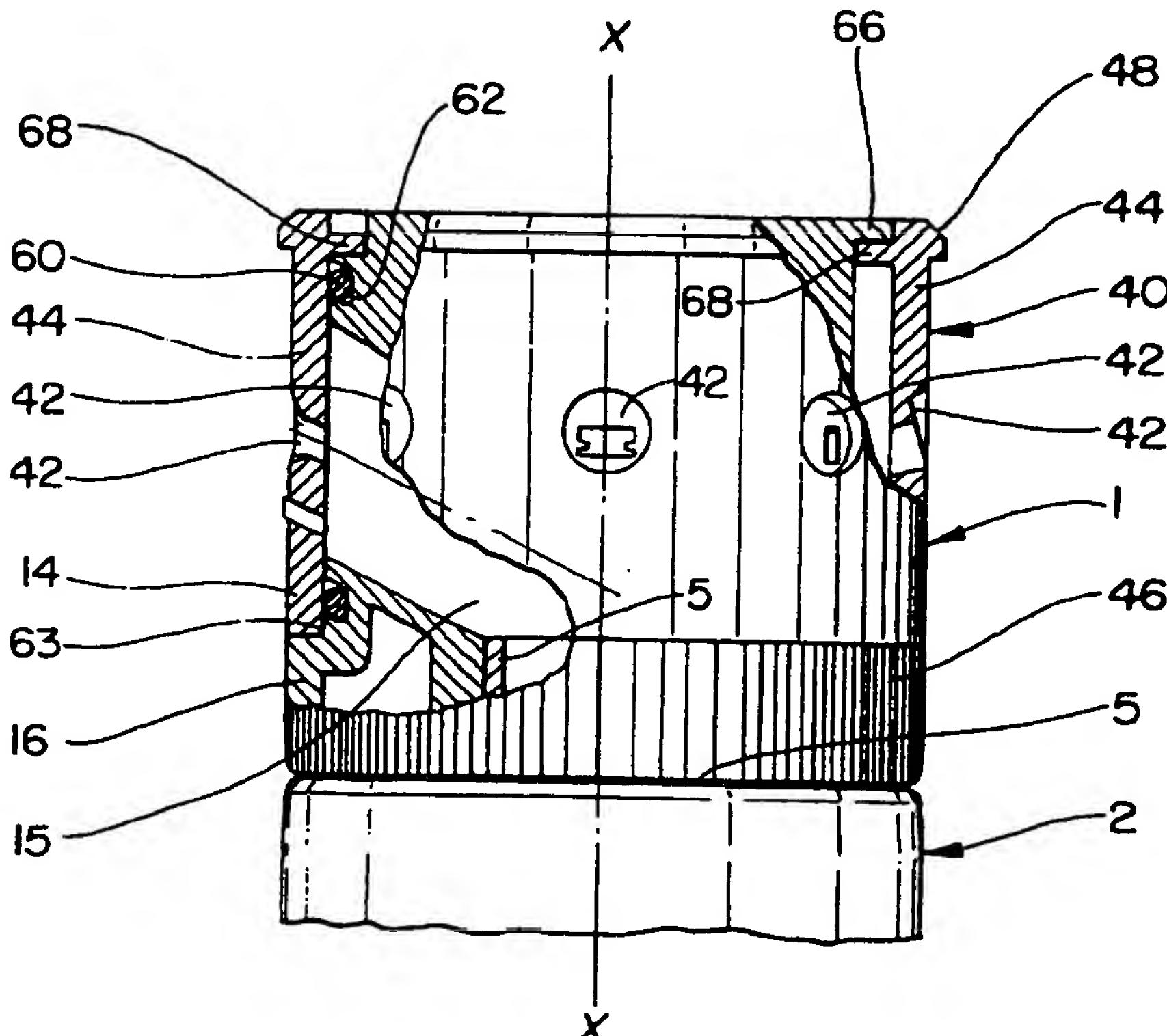
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Primary Examiner—Lesley D Morris

(57)

ABSTRACT

An oscillatable nozzle sprinkler with operationally changeable nozzles from the top. One configuration consists of a multiple nozzle cylindrical sleeve which allows a desired nozzle for flow rate and trajectory to be rotationally selected while the sprinkler is operating. Another configuration allows individual nozzles to be inserted into the top of the sprinkler housing while the sprinkler is operating.



**REEXAMINATION CERTIFICATE
ISSUED UNDER 35 U.S.C. 307**

THE PATENT IS HEREBY AMENDED AS
INDICATED BELOW.

Matter enclosed in heavy brackets [] appeared in the patent, but has been deleted and is no longer a part of the patent; matter printed in italics indicates additions made to the patent.

AS A RESULT OF REEXAMINATION, IT HAS BEEN DETERMINED THAT:

The patentability of claims 12-15 is confirmed.

Claim 3 is cancelled.

Claims 1, 4-11, 16 and 18 are determined to be patentable as amended.

Claims 2, 17 and 19, dependent on an amended claims are determined to be patentable.

New claims 20 and 21 are added and determined to be patentable.

1. A sprinkler [having] comprising:

a rotatable nozzle housing having a water passage formed therein;

an output shaft mechanically connected to said rotatable nozzle housing for rotating said nozzle housing[.];

a manually adjustable rotatable sleeve having an inner surface and a plurality of circumferentially spaced [orifices:] nozzles, each of said nozzles having mutually different configurations from each other, said rotatable sleeve [is] being slidably installed around the nozzle housing and being in rotational relationship therewith and thereto so that said rotatable sleeve can be selectively positioned to align one of said plurality of nozzles with the discharge end of the water passage for distributing water outwardly from said sprinkler;

sealing means surrounding the discharge end of [a] the water passage formed in said nozzle housing[.], said sealing means including a seal member surrounding the discharge end of the water passage and dimensioned to continuously bear against said inner surface of said rotatable sleeve to provide a sealed connection to the pressurized water passage of the nozzle housing[, wherein said rotatable sleeve is selectively positioned to align one of said plurality of orifices with said discharge end of the water passage for distributing water outwardly from said sprinkler.]; and means for retaining said [nozzle selection] rotatable sleeve in place.

4. A sprinkler as claimed in claim [3] 1, wherein said sealing means is an "O" ring.

5. A sprinkler as claimed in claim [3] 1, wherein said rotatable nozzle housing is cylindrical and includes an outer surface, and said [separate] rotatable sleeve is dimensioned so that the outer diameter thereof is substantially equal to the outer diameter of said outer surface of said rotatable nozzle housing.

6. A sprinkler as claimed in claim [3] 1, wherein a portion of said [separate] rotatable sleeve is blank, and wherein [so

that] said [separate] rotatable sleeve [is] can be selectively positioned so that said blank portion overlies said discharge end of said water passage whereby said sprinkler is capable of being turned off without turning off the water supply.

7. A sprinkler as claimed in claim 6, wherein said rotatable nozzle housing includes a reduced diameter surface, said inner [diameter] surface of said rotatable sleeve being in slidable relationship with said reduced diameter surface of said rotatable nozzle housing.

10 8. A sprinkler as claimed in [claims] claim 7, further comprising [including] a riser assembly operatively connected to said rotatable nozzle housing, said riser assembly including a cylindrical member having an outer diameter, the outer diameter of said [separate] rotatable sleeve being substantially equal to the diameter of said outer diameter of said cylindrical member.

15 9. A sprinkler as set forth in claim [3] 1, wherein said rotatable nozzle housing includes indicia on the top indicating the location of each orifice of said plurality of orifices and/or its flow characteristic.

20 10. A sprinkler as claimed in claim [3] 1, wherein said [separate] rotatable sleeve is slidably installed from the top of said sprinkler.

11. A sprinkler as claimed in claim 1, wherein said nozzle housing further includes an outer surface, and gripping means formed on said outer surface to hold said nozzle housing from rotating when said sleeve is rotated.

16. A water sprinkler [having] comprising:
a riser assembly[.];
a drive shaft extending from the top of said riser assembly[.];
a nozzle housing assembly[.], said nozzle housing assembly] having
a housing connected to said drive shaft for rotation therewith, [said nozzle housing assembly having]
a cylindrical outer surface, and
a flow passage formed therein which has an exit at said cylindrical outer surface; and

30 a cylindrical nozzle selection sleeve [being] mounted over the outer surface of said housing to rotate therewith and being manually [rotated] rotatable relative to said housing, said nozzle selection sleeve having a sleeve wall with a multiplicity of individual nozzles spaced therearound, [said housing having a flow passage therein with an exit at said cylindrical outer surface.] said individual nozzles having mutually different configurations from each other to produce respectively different flow characteristics and being positioned on said sleeve wall so that each nozzle becomes aligned with said flow passage exit as the nozzle selection sleeve is rotated.

40 18. A water sprinkler as claimed in claim 16, further including sealing means surrounding said flow passage exit to provide a sealed connection [to] between the nozzle housing and the selection sleeve around the pressurized [water] flow passage of the nozzle housing to prevent water exiting the flow passage and through the nozzle aligned with the flow passage exit from leaking.

50 20. A sprinkler as claimed in claim 1, wherein the rotatable sleeve is removably installed on the nozzle housing.

60 21. A water sprinkler as claimed in claim 16, wherein the nozzle selection sleeve is slidably removable from said housing.